We claim:

1. A method of signal transmission comprising the steps of:

splitting a signal s_1 into signals $s_1(a)$ and $s_1(b)$, wherein the signal s_1 is split unevenly such that the signal $s_1(a)$ has an associated power level greater than a power level associated with the signal $s_1(b)$;

phase sweeping the signal $s_1(a)$ using a first phase sweep frequency signal to produce a phase swept signal $s_1(a)$; and

phase sweeping the signal $s_1(b)$ using a second phase sweep frequency signal to produce a phase swept signal $s_1(b)$, wherein the phase swept signal $s_1(a)$ has a different phase from the phase swept signal $s_1(b)$.

2. The method of claim 1, wherein the first phase sweep frequency signal phase sweeps the signal $s_1(a)$ in a direction opposite to a direction the second phase sweep frequency signal phase sweeps the signal $s_1(b)$.

3. The method of claim 2, wherein a first phase sweep frequency associated with the first phase sweep frequency signal is identical to a second phase sweep frequency associated with the second phase sweep frequency signal.

4. The method of claim 2, wherein a first phase sweep frequency associated with the first phase sweep frequency signal is not identical to a second phase sweep frequency associated with the second phase sweep frequency signal.

5. The method of claim 2, wherein a first phase sweep frequency associated with the first phase sweep frequency signal is a fixed phase shifting rate.

6. The method of claim 2, wherein a first phase sweep frequency associated with the first phase sweep frequency signal is a variable phase shifting rate.

7. The method of claim 2, wherein a second phase sweep frequency associated with the second phase sweep frequency signal is a fixed phase shifting rate.

8. The method of claim 2, wherein a second phase sweep frequency associated with the second phase sweep frequency signal is a variable phase shifting rate.

9. The method of claim 1, wherein the first and second phase sweep frequency signals phase sweep the signals $s_1(a)$ and $s_1(b)$ in a same direction.

10. The method of claim 9, wherein a first phase sweep frequency associated with the first phase sweep frequency signal is identical to a second phase sweep frequency associated with the second phase sweep frequency signal.

11. The method of claim 9, wherein a first phase sweep frequency associated with the first phase sweep frequency signal is not identical to a second phase sweep frequency associated with the second phase sweep frequency signal.

12. The method of claim 1 comprising the additional step of:

amplifying the phase swept signals $s_1(a)$ and $s_1(b)$.

13. The method of claim 1 comprising the additional step of:

transmitting the phase swept signals $s_1(a)$ and $s_1(b)$ over a pair of diversity antennas.

14. A method of signal transmission comprising the steps of:

splitting a signal s_1 into signals $s_1(a)$ and $s_1(b)$, wherein the signal s_1 includes a communication signal;

phase sweeping the signal $s_1(a)$ using a first phase sweep frequency signal to produce a phase swept signal $s_1(a)$; and

phase sweeping the signal $s_1(b)$ using a second phase sweep frequency signal to produce a phase swept signal $s_1(b)$, wherein the phase swept signal $s_1(a)$ has a different phase from the phase swept signal $s_1(b)$.

15. The method of claim 14, wherein the first phase sweep frequency signal phase sweeps the signal $s_1(a)$ in a direction opposite to a direction the second phase sweep frequency signal phase sweeps the signal $s_1(b)$.

16. The method of claim 15, wherein a first phase sweep frequency associated with the first phase sweep frequency signal is identical to a second phase sweep frequency associated with the second phase sweep frequency signal.

17. The method of claim 15, wherein a first phase sweep frequency associated with the first phase sweep frequency signal is not identical to a second phase sweep frequency associated with the second phase sweep frequency signal.

18. The method of claim 15, wherein a first phase sweep frequency associated with the first phase sweep frequency signal is a fixed or a variable phase shifting rate.

19. The method of claim 15, wherein a second phase sweep frequency associated with the second phase sweep frequency signal is a fixed or variable phase shifting rate.

20. The method of claim 14, wherein the first and second phase sweep frequency signals phase sweep the signals $s_1(a)$ and $s_1(b)$ in a same direction.

21. The method of claim 20, wherein a first phase sweep frequency associated with the first phase sweep frequency signal is identical to a second phase sweep frequency associated with the second phase sweep frequency signal.

22. The method of claim 20, wherein a first phase sweep frequency associated with the first phase sweep frequency signal is not identical to a second phase sweep frequency associated with the second phase sweep frequency signal.

23. The method of claim 14 comprising the additional step of:

amplifying the phase swept signals $s_1(a)$ and $s_1(b)$.